

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

1. (currently amended) A method for providing driver-independent, printer-independent page manipulation options in a printing system through a page-independent spool file index, said method comprising:
 - reading a spool data file for a document;
 - creating a Page-Independent Spool File (PISF) index file that is distinct from said spool data file, but based on data in said spool data file, wherein said PISF index file comprises a ~~first~~ link to said spool data file, wherein said ~~first~~ link identifies a ~~first~~ portion of said spool data file required to print an ~~first~~ independently-formatted page-specific unit of said document;
 - manipulating said PISF index file, after creation of said PISF index file, to effect a document page format manipulation option, wherein said document page format manipulation option is selected from the group consisting of page order, page copies, page scaling and page placement, thereby producing a manipulated PISF index file; and

using a print processor customized to use said manipulated PISF index file, generating printer-ready data, for a modified document created via said page format manipulation, from portions of said spool data file identified by said manipulated PISF index file.

2. (previously presented) The method of claim 1 further comprising providing a user interface for user manipulation of said PISF index file, after creation of said index file, to effect said document page format manipulation option.
3. (currently amended) The method of claim 1 wherein said ~~manipulating comprises re-ordering of pages in said document~~ PISF index file comprises indices to distinct spool data chunks corresponding to the sequential order: Print Job Header, the front and back of each sheet of the document and the Print Job Footer.
4. (currently amended) The method of claim 1 wherein global, persistent commands in said spool data file are allocated to page-specific units in said PISF index file ~~2 wherein said user manipulation is performed via a spooler user interface.~~
5. (currently amended) The method of claim 1 wherein said using a print processor comprises Ordered Index File Processing wherein said PISF index file is modified to effect document output changes in the order: 1) page order, 2) page scale and placement, and 3) sheet collation ~~PISF index file is created by a process that is independent of the process that created said spool data file.~~

6. (currently amended) The method of claim 1 wherein said PISF index file
comprises information for locating a Print Job Command record, which comprises
a location, size and data type of a Collate and Number of Copies command index
~~is created by a modified print processor.~~
7. (currently amended) The method of claim 1 wherein said PISF index file
comprises a Face record for each side of a page in said document is stored
~~independently of said spool data file.~~
8. (previously presented) The method of claim 1 wherein said PISF index file is
created by a print system component other than the component that creates said
spool data file.
9. (previously presented) The method of claim 1 wherein said manipulation of said
PISF index file comprises changing collation options.
10. (currently amended) A method for performing document formatting options in a
printing system, said method comprising:

manipulating a PISF index file to effect document formatting, wherein
said document formatting comprises a document page format
manipulation option, wherein said document page format manipulation
option is selected from the group consisting of page order, page copies,

page scaling and page placement, after creation of said PISF index file, wherein said PISF index file comprises a ~~first~~ link to a spool data file, wherein said ~~first~~ link identifies a ~~first~~ portion of said spool data file required to print a first independently-formatted page-specific-unit corresponding to a page of said document, wherein said first independently-formatted page-specific-unit is based on document-wide, persistent, page formatting data in said spool data file, thereby producing a manipulated PISF index file; and using a print processor customized to use said manipulated PISF index file, generating printer-ready data for said page from portions of said spool data file identified by said manipulated PISF index file.

11. (previously presented) The method of claim 10 wherein said manipulating comprises changing the order of a page in said document.
12. (currently amended) The method of claim 10 wherein said ~~manipulating~~ comprises changing collation options for said document PISF index file comprises indices to distinct spool data chunks corresponding to the sequential order: Print Job Header, the front and back of each sheet of the document and the Print Job Footer.
13. (currently amended) The method of claim 10 ~~wherein said manipulating is accomplished through a print assistant between a driver and a printer~~ wherein

global, persistent commands in said spool data file are allocated to page-specific units in said PISF index file .

14. (currently amended) A method for obtaining page-independent print data in a printing system, said method comprising:

reading a PISF index file that is separate from a spool data file, wherein said PISF index file comprises a ~~first~~ link to said spool data file, wherein said ~~first~~ link identifies a ~~first~~ portion of said spool data file required to print an ~~first~~ independently-formatted, ~~page-specific-unit~~ , wherein said independent formatting is derived from document-wide, persistent, page formatting data in said spool data file; and

using a print processor customized to use said PISF index file, accessing data indexed in said ~~first~~ PISF index file ~~to form a print job~~ print said page.

15. (original) The method of claim 14 wherein said PISF index file is produced by a print processor.

16. (currently amended) The method of claim 14 wherein said ~~PISF index file is produced by a spooler~~ PISF index file comprises indices to distinct spool data chunks corresponding to the sequential order: Print Job Header, the front and back of each sheet of the document and the Print Job Footer .

17. (original) The method of claim 14 wherein said PISF index file is produced by a print system component in a print system between a driver and a printer.

18. (currently amended) A printing system with driver-independent, printer-independent document formatting, said system comprising:

a reader for reading a spool data file for a document;

an indexer for converting document-wide, persistent, page formatting data in said spool data file into a page-independent spool file (PISF) index file comprising a ~~first~~ link to said spool data file, wherein said ~~first~~ link identifies a first portion of said spool data file required to print an ~~first~~ independently-formatted, page-specific unit; and

a customized print processor capable of interfacing with said PISF index file to generate printer-ready data corresponding to said page from portions of said spool data file identified in said PISF index file.

19. (currently amended) A computer-readable medium comprising computer-executable instructions for creating a printer-ready data, said instructions comprising the acts of:

reading a spool data file for a document;

creating a Page-Independent Spool File (PISF) index file that is distinct

from said spool data file, but based on data in said spool data file,

wherein said PISF index file comprises a ~~first~~ link to said spool data

file, wherein said ~~first~~ link identifies a first portion of said spool data

file required to print a first independently-formatted page-specific unit
of said document;

manipulating said PISF index file, after creation of said PISF index file, to
effect a document page format manipulation option, wherein said
document page format manipulation option is selected from the group
consisting of page order, page copies, page scaling and page
placement, thereby producing a manipulated PISF index file; and
using a print processor customized to use said manipulated PISF index
file, generating printer-ready data for said page from portions of said
spool data file identified by said manipulated PISF index file.

20. (canceled)